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Nota di contenuto	13th Annual Conference on Composites and Advanced Ceramic Materials; Table of Contents; Processing: Non-Oxide Composite Ceramics; Nitriding Kinetics of Si-Sic Powder Mixtures as Simulations of Reaction Bonded SiJ4-SiC Composites; Mechanical Properties of Beta-Silicon Nitride Whisker/Silicon Nitride Matrix Composites; Processing Parameters for Whisker- Reinforced Composites; Processing of Sic Whisker-Reinforced Sid4 Composites; Fabrication and Properties of S i d , Composites Reinforced by SIC Whiskers and Particles Tough Silicon Nitride Matrix Composites Using Textron Silicon Carbide MonofilamentsInfluence of Sic Dispersion on Thermo-Mechanical Properties of SiJV4-SiC Nano-Composites; Sic Whisker-Reinforced Sialon Composites: Effect of Sintering Aid Content; Novel Siliconized Mixed-Phase Ceramics; Sic-MoSi, Composites; Continuous Fiber-Reinforced Titanium Diboride Matrix Composites; Microcrack

Toughening in TiB_x-AIN Composite; SIC Matrix Composites Reinforced with Internally- Synthesized TiBz; Composites: Failure Analysis, I; Fracture Mechanisms in Ceramic Composites

Cyclic Fatigue-Crack Propagation Behavior in Advanced CeramicsNon-Steady State Cracking in Ceramic Matrix Composites; Creep

Characterization of Short Fiber-Reinforced Ceramic Composites; First-Cracking Strength of Short Fiber-Reinforced Ceramics; Residual Stresses and Damage in Unidirectional Model Composites; Speculation on the Creep Behavior of Silicon Carbide Whisker-Reinforced Alumina; Mechanics of Crack-Tip Damage During Static and Cyclic Crack Growth in Ceramic Composites at Elevated Temperatures

Failure Characteristics of Low Dielectric Constant Ceramic Composites Reinforced With BN-Coated FibersFracture Behavior of Sic,-Reinforced Ceramic Composites; Thermal Shock Behavior of an SIC Fiber-Reinforced Cordierite Composite; Creep Testing of Ceramics; Engineering Applications of Composites; Performance of Advanced Ceramic Coatings in Simulated High-speed Earth Entry Environments; Developments in High Temperature Reusable Surface Insulation Coatings; Edge Effects in Porous Cellular Materials; Oxidation Issues in C/Oxide Composites

Ceramic Valve Development for Heavy-Duty Low Heat Rejection Diesel EnginesComposite Wear-Resistant Ceramic Coatings for Advanced Diesel Engine Applications; Diamond Toughened Zinc Sulfide Ceramic Composites for Infrared Window Materials; Preparation of Zirconia Fibers By Sol-Gel Method; Effect of Alumina Composition on Interfacial Chemistry and Strength of Direct Bonded Copper- Alumina; Cast Joining Between Sic and Aluminum; Ceramic Port Shields Cast in an Iron Engine Head; Cryogenic Properties of Aluminum Alloys and Composites; Composites: Failure Analysis, I1

Scatter of Strength in Whisker-Reinforced Ceramics

Sommario/riassunto

This volume is part of the Ceramic Engineering and Science Proceeding (CESP) series. This series contains a collection of papers dealing with issues in both traditional ceramics (i.e., glass, whitewares, refractories, and porcelain enamel) and advanced ceramics. Topics covered in the area of advanced ceramic include bioceramics, nanomaterials, composites, solid oxide fuel cells, mechanical properties and structural design, advanced ceramic coatings, ceramic armor, porous ceramics, and more.
